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ABSTRACT

A review of the literature indicates that individual ownership enterprises (projects) have been the dominant type of supervised occupational experience (SOE) program for agricultural students historically and up to the present time. These projects thrive most in small rural communities inhabited by farmers and small business owners. All the correlations of factors associated with good SOE programs point to the small rural area; success is likely if the school is small, the area is rural, the teacher had vocational agriculture as a student, the teacher was farm reared, lives close to the school, often visits students at home, has a good attitude about ownership projects, gives grades on SOE projects, is involved with fairs and shows, and devotes class time to SOE. Supportive parents and informed administrators are also positive factors. The students who come from this rural farm background are most likely to work in an agricultural occupation. Not determined in the research is whether students with strong farm backgrounds take agricultural jobs because of experiences or desires or because they do not want to leave the home area and jobs in their community are predominantly agricultural. It is also not known whether entrepreneurship experiences without a rural community, home farm, and supportive family are still associated with the kinds of benefits found. (31 references.) (KC)

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STUDENT OWNED ENTERPRISES/ENTREPRENEURSHIP

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Individual enterprises of vocational education students who engage in these enterprises away from the school is the topic of this paper. The paper is about ownership and self-employment. The paper is about risking the loss of capital on the part of the student and using the needed competencies to plan and conduct enterprises in such a way as to give a reasonable return to capital, labor and management. The enterprises of students involve mostly self-labor, but assistance from others in all aspects of the enterprise is part of the nature of educational programs. The narrower definitions of the term entrepreneurship applies to these individually owned projects. The meaning of entrepreneurships used by Long (1983) is the one used in this paper. Long (1983) reviewed various definitions of entrepreneurship employed by a number of theoretical economists since Richard Cantillon (circa 1730). Three recurring themes emerged from their definitions, namely that "entrepreneurship" involves: 1) uncertainty and risk, 2) complementary managerial competence, and 3) creative opportunism. The authors argue that modern definitions of entrepreneurship that exclude any of these three fundamental dimensions are basically incomplete.

Some definitions of entrepreneurship do not require that the employment be self-employment. These definitions include wage earning situations where there is a decision making role. The

employee path to ownership and management is a common and usually necessary one for capital intensive enterprises. Paths to ownership often take the employee route. That approach is the cooperative education model and is not part of this paper.

Individual, student-owned enterprises as a means to learn and grow into an occupation have been used widely over the years in vocational agriculture. There is potential for them in other vocational services, but they are used infrequently. For that reason this paper is about vocational agriculture. Prior to 1963, Federal legislation was directed to farming. Since 1963, the program has been directed to agriculture, which is more than farming and has brought training for wage earning. Off-farm agriculture has been an addition and not a replacement in most schools.

Production agriculture is a phase that younger students can legally engage in, and the knowledge of it is basic to many of the other agricultural occupations. Except for the at-school experiences, the occupational experience programs of agriculture students are mostly individual ownership of production projects. This is important to the interpretation of this paper because studies in recent years quite often do not distinguish between ownership projects and other kinds of supervised occupational experience (SOE) that are included. Cooperative education is usually separated out. The period of time in which a study was conducted, that is 1960's or earlier, how rural the location of the study is, and the course title in which students are enrolled help in identifying a study as one about ownership projects.

What is known and not known about ownership enterprises and other forms of supervised occupational experience (SOE) may be related to what has been researched and what has not. Certain research topics become popular and are conducted in numerous locations and states. Studies tend to focus on intermediate outcomes such as grades, attitudes, size of the student-owned enterprises instead of success in occupations beyond school. Some topics are more expensive in time and money, and they tend not to be researched as much. One of the expensive and long-term kind of studies concerns the benefit of education through ownership projects or other kinds of directed work experience to success in an occupation. A few studies have investigated the relationship of student ownership projects to later occupational outcomes. As is the situation with much educational research, more is known about relationships than causes.

Relation of Factors to Careers

Tullock (1974) found significant positive relationships between income from projects and present income, and work experience and present income in a study of vocational agriculture students who had been out of high school seven to nine years. He concluded that students with the highest income from projects become employed in agricultural occupations. Judge (1964) found positive relationships between hours of farm work experience, owned projects, hours of off-farm work experience, total hours of work experience and choice of agricultural occupation. Edington and Hill (1964) found that the higher the FFA degree achieved, the greater the chance of the graduate

entering farming, entering post-secondary education institution and being employed. Taylor (1983) found that as the scope of the farming programs of the former students increased, the likelihood of their first and present job being in agriculture also increased. He also found that having larger projects as students meant larger incomes six years later. The yearly income of former students who had farming programs that were large in scope were higher than the yearly incomes of those who had farming programs which were small in scope. This study was a follow-up of subjects in the McMillion and Auville study (1976).

Mick (1984) found that students who gained most in net income during high school from their experience programs were more likely to be employed their first year out of high school full time or part time in an agricultural occupation. Those who had farm backgrounds prior to enrolling in agriculture were more likely to be engaged in an agricultural occupation full time. Those students who had placement types of experiences while in high school vocational agriculture were more likely to be engaged in occupations <u>not</u> related to agriculture.

Relation of Factors to Farming Program Scores

Cavey (1985) conducted a statewide study of vocational agriculture students in Colorado in 1982. This study is of particular importance because of the scope and the emphasis on ownership enterprises in Colorado. The study found the usual positive correlations between quality indicators of SOE programs and teacher practices and other factors. The unique part of the study was the attention to occupational objective. The students'

present experience program was not found to be closely aligned to their occupational objective. Cavey reported that students did not perceive the need for the experience program to lead to the occupational objective. Also, he advanced an explanation that experience programs may be undertaken more to please the instructor than to lead to establishment in an agricultural career.

McMillion and Auville (1976) identified factors which best predicted the farming program score of students. In the order of importance (stepwise regression) these factors were: teacher assists with fairs and livestock shows, teacher did not have a part-time job, teacher informs the administration of FFA and departmental activities, teacher had vocational agriculture training in high school,and the nearness of the school to original home location of the teacher.

Attitudes Toward and Benefits of Supervised Experience

From the literature it appears that if those involved think ownership projects are important and support them, there are good projects. If parents, students, teachers, state supervisors, teacher educators, national staff persons, and others believe that ownership projects, cooperative education or other forms of directed work experience are important, then such programs thrive. For this reason the attitudes and actions of all the above groups are of importance and are aspects to be covered in this paper.

Two national conferences in the early 80's sponsored by USDE demonstrated the interest of that level of government in

supervised occupational experience in agriculture. A search of the literature around that period reveals an increase of studies on the topic. Several studies of the benefits of supervised occupational experience to parents, students, and others followed the early studies of Williams (1979) and Rawls (1980) at Iowa State University. Attitudes toward supervised occupational experience, how various groups could help, and other useful information was gathered. These studies were useful in focusing attention on supervised occupational experience, providing information, raising questions, and contributing to the national conferences which focused on ownership projects, cooperative education, and other types of supervised occupational experience.

Relationship of SOE to Test Achievement

The relationships of ownership projects to agricultural knowledge as measured by tests have not been consistent. An early study by Morton (1980) found a positive relationship between the quality of supervised occupational experience, as measured by labor income and the scope of the student's program, and the level of achievement in technical knowledge for students in production agriculture. A series of similar studies in Florida for various courses, have shown no consistency. The latest study reported by Tylke and Arrington (1988) reported no relationship between the experience program of the student and test achievement on tests developed for the livestock curriculum. The degree to which the tests reflect what students do and learn on the job could be the problem.

Scoring SOE's

What a good SOE program is has been tied to the ownership model. Money invested and made have been weighted heavily in most of the scoring schemes. Scoring of ownership projects have been according to size of enterprise, the money made, the money invested and the increase of these from year to year while in the program. A scoring scheme using the above that was devised by McMillion and Auville (1976) has been used widely in other studies. Bird (1983) added relation to occupational objective, management responsibilities and variety of enterprises. Management responsibilities and the amount of risk taken by the student would seem to be appropriate additions according to the definition of entrepreneurship. Dillingham (1980) used only net income. Cavey (1983) used dollar value of the SOE program and quality of product produced plus closeness to occupational objective and others, but did not combine these into one score. Objectives of ownership projects have been uniform, and the measures of success of ownership projects have been fairly appropriate. The variety of types of supervised experiences now being used will require attention to measures that are common to other kinds of experience programs. Competencies used and the amount of practice are two suggestions.

Status Studies

In the last few years status studies of supervised occupational experience have been made in virtually every Western state. These are the type of a recent one in Idaho by Pals and Slocombe (1989). These studies have focused upon slippage in the

use of supervised occupational experiences and the value and appropriateness as perceived by students, teachers, parents and others. These studies are mostly staff studies that address questions which were similar to the ones Williams (1978) and several doctoral students studied, plus the usual kinds of statistics found in state reports. Slippage in the amount of visitation, the time spent teaching about supervised experience programs, and the number of students participating was evident. No visitations were made to 28.4 percent of students in a twelve-month period according to the Pals and Slocumbe (1989) study. A nationwide study of horticulture programs by Burnett and Smith (1983) revealed that only 58 percent of teachers taught a unit about supervised occupational experiences.

Ownership projects came naturally to generations of vocational agriculture teachers and students as did the principles of management and economics. They just carried out their projects, probably not knowing that their projects could be called entrepreneurship and that experience and knowledge of it was transferable to other ventures. Osborne (1984) in the introduction to the theme issue of Agricultural Education Magazine on entrepreneurship noted that entrepreneurship had historically been the key part of nearly all supervised occupational experience programs and that teachers were now discovering that entrepreneurship is appropriate for agricultural businesses other than farming. This transferability goes even farther according to Ashmore (1989).

Ashmore (1989) reported about a study of business owners in Ohio. These business owners were not just startup entrepreneurs. Sixty percent actually started a business, 21 percent purchased a business, and 13 percent inherited a business. Vocational program graduates were even more likely to report inheriting a business (18 percent). One third of the vocational program graduates had parents who had also been in business. The transferability of vocational skills helped Ohio's business owners start a business in diverse business classifications. For example, only 60 percent of those who had taken vocational agriculture reported a business in that SIC code. Or stated another way, forty percent were not in an agricultural SIC code.

Entrepreneurship training through ownership projects may have special and transferable benefits. Conclusions on the part of teachers and the profession that ownership projects for many of our students are as inappropriate as they are difficult to provide could be a mistake.

Development of small business by individuals has been emphasized in recent years as a means of economic development for the economy as a whole, for women and minorities. Most of this literature has focused on adults and will not be covered in this paper. However, the importance for adults can logically be extended to the youth population.

Turner (1970) studied the relationship between the nature of father's occupation and the level of achievement motivation among sons. Results indicate that adolescents with high need-achievement come from homes where fathers engage in

entrepreneurial role behavior in their occupations. (In this study the definition of entrepreneur included managers as well as owner-managers.) The relationship was found to be true regardless of social class or whether the community was modern or traditional (rural).

Would a investigation of vocational students reveal that the teaching of entrepreneurship, having ownership projects, and coming from a family that is in business are related to self-employment as an adult? Do these entrepreneurial environments in the family or emphasis at school lead to entrepreneurial occupations?

Summary

Individual ownership enterprises (projects) have been the dominant kind of supervised experience program for agriculture students historically and up to the present time. These kinds of projects thrive most in the small rural communities, sometimes referred to as traditional communities. It is here that rural areas are inhabited by farmers and small business people. All the correlations of factors associated with good supervised occupational experiences point to the small rural area. A description of the place and conditions for strong ownership projects is as follows: the school is small, the area is rural, the teacher had vocational agriculture as a student, the teacher is farm reared, the teacher lives close the school, the teacher visits the students often at their homes. (Recording of visits is a stronger correlate than just number of visits.) The parents are supportive, the teacher has a good attitude about ownership

projects, the teacher grades on supervised occupational experience programs, the teacher is involved with fairs and shows, the administrators are informed about SOE and FFA activities, and classtime is devoted to SOE. The students who come from this rural farm background are most likely to work in an agricultural occupation

One of the things we do not know is whether students with strong farm backgrounds take agricultural jobs because of experiences or desires or because they do not want to leave the home area, and the jobs in the kind of community they are from are predominantly agricultural. (If they are going to work at all the chances of them getting an agricultural job is likely.) A look at the states in which these findings were reported are rural enough. The states were Virginia, Michigan, Kentucky, Utah, and Missouri.

It is not known whether entrepreneurship experiences without a rural community, home farm and supportive family are still associated with the kinds of benefits reported in this study. Urban schools which use school farms must decide whether to organize the supervised experience program to use individual ownership, group ownership, or employee approaches.

The increased kinds of delivery systems for directed experience in vocational agriculture (ownership, work for wages, school group enterprise, volunteer experiences, and the more recent agricultural science projects) make it necessary to focus future studies on a particular delivery system rather the just directed experience arrangements in general.

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